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ABSTRACT

This paper highlights some of the issues concerning the transfer of Research and Development (R&D) Centers from the Office of Education to the National Institute of Education (NIE). The problems of transition to the new policy and organization are discussed with regard to program objectives and management and problems associated with implementing fiscal year 1973 (FY 73) funding requirements. The issues considered in relation to program objectives are a) the need for specialized R&D centers; b) the maintenance of a special relationship between NIE and R&D centers; c) NIE support of improvement in R&D management and technology; and d) achievement of a balance in policy conflicts regarding flexibility vs. continuity, mission focus vs. conglomeration, and research vs. development. Program management issues discussed are a) coordination of policy implementation; b) completion of design of the assessment system for the new policy; c) budgeting, organization, and management of product dissemination; and d) the requirement that universities cost share in the support of R&D centers. Problems of implementing the FY 73 funding requirements are identified as being concerned with: a) consistency between funding recommendations and program policy, b) the negotiation process, c) contract/grant terms and conditions, and d) the increased cost of the new policy. The author concludes that FY 73 should be considered a year of transition during which NIE carefully and deliberately moves to establish a lasting program. (HMD)

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ISSUES RELATED TO THE TRANSFER OF THE R & D CENTER AND EDUCATIONAL LABORATORY PROGRAMS TO THE NATIONAL INSTITUTE OF EDUCATION

by

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NATIONAL INSTITUTE OF EDUCATION
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7/17/72
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ISSUES RELATED TO THE TRANSFER OF THE R&D CENTER AND EDUCATIONAL LABORATORY PROGRAMS TO THE NATIONAL INSTITUTE OF EDUCATION

I. Introduction

This paper is being prepared at a time when legislation for establishment of the National Institute for Education (NIE) has been passed and the process of transition of educational R&D programs from OE to the new agency is beginning. The purpose is to highlight a number of issues concerning the Center and Laboratory Programs for the consideration of the new leadership.

The paper accepts as given the framework for a new institutional support policy as described by Charles Frye. 1/ That is, it is assumed that new institutions will be given institutional support only through their early developmental stages and that funding decisions will be keyed to the support of long term programs with specific end points once the institutions have reached maturity. We also assume that a major focus of management concern will be on the coordination of lab and center programs dealing with similiar educational problems.

1/ Charles Frye, "Management Policy for Institutional Support and Assessment," National Center for Educational Research and Development, unpublished, February 9, 1972.

During the past year two teams of outside experts formulated designs for an assessment system keyed to the ten-decisions of the institutional support policy. 2/ The two-tier panel system of the Scriven Team report is taken to be the framework within which the institutional programs will be evaluated in the NIE context.

This paper is based largely on the experience of one who has been associated with these programs from their beginning, on limited conversations with other staff members in the program, and on a number of documents generated over several years. Assumptions concerning the NIE context to which the programs will be moving are derived from two interim documents dated April 15, 1972 3/ and by a more recent organization chart dated June 13, 1972.

The body of the paper is divided into two major sections, Problems of Transition to the New Policy and Organization, and Problems of Implementing This Year's Funding Recommendations.

2/ Michael Scriven, "An Evaluation System for Regional Labs and R&D Centers," August 31, 1971.

Daniel L. Stufflebeam, "Design for Evaluating R&D Institutions and Programs," August 31, 1971.

3/ "Report on Organization and Management: An Interim Organization," NIE Planning Unit, April 15, 1972. "Program Planning for the National Institute of Education: Summary of Four R&D Analyses," NIE Planning Unit, April 15, 1972.

II. Problems of Transition to the New Policy and Organization

A. Program Objectives.

The Frye paper lists a number of objectives which are entirely acceptable [4/] but which are stated at a management or operational level. Greater coherence in the application of the new policy can be achieved if the fundamental policy objectives and assumptions of the institutional program as originally stated are reviewed and re-stated in the light of current conditions.

First of all, it is important that this program be placed in the context of the total national effort in educational R&D and of the total NIE program. Critics of the laboratories and centers have often appeared to start from the premise that these institutions represented one or both. They do not. Consider the following

- The advancement of basic research is an essential element of any overall plan. The fundamental strategy for its support has been and will continue to be the support of unsolicited project proposals. There are strong arguments, however, for supporting some basic research ancillary to programmatic R&D.

4/ Frye, op. cit., pp. 4-5. It is possible that not all the objectives stated are compatible with each other, and the policy statement needs to be analyzed for the degree to which it can be expected to meet these objectives.

- NIE has decided to put a portion of its resources into directed research and development to solve specific priority problems. Laboratories and centers will be significant competitors for such funds, but this role falls outside the purposes of this paper.

- NIE will have a variety of other programs for meeting special purpose needs (e.g., Research Training, Experimental Schools, New Initiatives, etc.)

The concern here, then, is with the policies and procudures which should govern NIE's relationship to a special set of institutions which have been established as a result of previous initiatives. Our concern is with that aspect of NIE's total program which deals with the support of field initiated programmatic R&D in these institutions.

1. Are Specialized R&D Institutions Needed? Two models of educational reform have been operative in the past decade:

   - The Exemplary Practice Model states that reform can be achieved from within. The federal government supports this strategy by searching for the best in current practice, often through formal evaluation procedures, and establishing such practices as exemplars for other practitioners to emulate. Such innovations

are generally based on the experience and insights of practitioners. Support for such innovations has been provided directly to operating schools systems through such programs as ESEA Titles I and III, Bilingual Program, Drop Out Prevention Program, etc. It is the basic model to be used by OE after the formation of NIE.

. The Research and Development Model draws upon both the wisdom of practitioners, and on new knowledge as developed in the underlying disciplines. For the most part R&D takes place outside of operating organizations. There are various sub-types of R&D, but a major one consists of procedures for taking specific improvement objectives and moving back and forth between the full complexity of the individual classroom and the oversimplified but disciplined knowledge of the laboratory in an iterative manner until a product is produced that achieves the objectives. Most of the programs supported under Cooperative Research have employed one or another sub-type of the R&D model.

The case for specialized R&D institutions in education rests upon the great complexity of the problems being addressed in education, the complexity of the R&D process, and the lack of existing institutions with the requisite capability.

The great complexity of social problems in general and educational problems in particular has been commented on frequently. Educational outcomes are dependent upon a large number of individual, educational, social, economic, community, etc. etc. variables, and small scale efforts concerned with only a few factors have generally been ineffective. The R&D model therefore puts a premium on large scale efforts which tend to be comprehensive in scope. This requires the contributions of people from many different disciplines (e.g., psychologists, sociologists, economists, etc.,) and technologies (e.g., computer specialists, graphics specialists, etc.) Not only are different kinds of people needed but also specialized resources of many kinds: computers, photographic and TV studies, experimental classrooms, graphics and arts facilities, etc. Such efforts tend to take considerable time, typically five years or more, from conception to completion. To manage such complex processes and resources it is necessary to introduce sophisticated management systems. Such efforts cannot be mounted quickly; they must be institutionalized and maintained through time with some degree of continuity; outstanding people must be recruited and given a highly professional climate for work.

We should remind ourselves that we are dealing with two kinds of R&D institutions, with different geneses. 5/ The center program was built on the assumption that greater progress could be made in solving problems if resources were concentrated on a specific substantive mission in each institution and a critical mass of manpower and other resources were built up. Programs were expected to interrelate and reinforce each other. Laboratories had a different origin. They began with regional missions and programs based on assessment of regional needs. Some still have a regional aspect, but all have come to focus on the development function and pride themselves on having the management capability to take on diverse large scale programmatic efforts. Laboratories also have important linkages with state and local schools systems which give them important diffusion and capabilities.

With a few exceptions, such institutions did not exist in educational research before the establishment of the Centers and Laboratories. Bureaus of educational research have been common in schools of education, but they have either tended to be pulled into service

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5/ The National Program on Early Childhood Education (NPECE) actually represents a third organizational model, one involving the coordination of several university based R&D centers. The two vocational research centers were originally sponsored under the vocational education legislation and have a slightly different history. The National Center for Higher Education Management System, which exists within the corporate structures of the Western Interstate Commission for Higher Education (WICHE), is a special case having some resemblence to NPECE.

activities at the expense of R&D, or have limited their role to facilitation of the project interests of individual investigators. 6/ Private industry, either through its publishing arm or more recently through the combinations of publishers and systems companies, has hestitated to underwrite the cost of testing of materials and may lack the ability to attract the necessary scientific talent. A few non-profits like the American Institutes for Research and the Educational Testing Service provide some of the needed capability but fall far short of the total required.

The following statement of objectives has guided the Laboratory and Center Programs since 1966 and should be used as a point of reference in reviewing the program objectives under the new policy: 7/ Program objectives are to:

"1. Alleviate major educational problems through large-scale long-term programmatic research, development and diffusion of knowledge, products and practices.

6/ Sam D. Sieber, with the collaboration of Paul F. Lazarsfeld, The Organization of Educational Research in the United States, Cooperative Research Project 1974, Bureau of Applied Social Research, Columbia University, New York City, 1966, pp. 93-149.

7/ A Status Report on the National Program of Educational Laboratories, R&D Centers, and Related Institutions Administered by the Division of Manpower and Institutions, NCERD Airlie House Conference, April 14, 1971, pp. 2-3.

"2. Create and maintain a new infrastructure in education that is needed to develop solutions to critical educational problems including:

- the development of a network of specialized institutions
- the definition and elaboration of the technology of educational research and development
- the development of an interdisciplinary pool of manpower skilled in the process of programmatic educational research and development, and
- the development and maintenance of linkages by these institutions between educational practitioners, R&D performers, policy makers, and the sources of support needed to effect changes in practice."

To this might be added the capability for the assessment of needs and for identifying new problems and priorities. Given the decentralized and pluralistic nature of American education, it is essential that a portion of the national effort be equally decentralized and pluralistic.

2. Should NIE Maintain a Special Relationship with the Laboratories and Centers? Such a relationship has existed in the past and clearly will exist with respect to developing institutions under the new policy. The question is directed primarily to those institutions which will be classified as mature and which will operate under the "program purchase" policy. Can the mature institutions survive under this policy if some kind of special relationship is not maintained, and if so, can they be optimally productive?

   a. Reciprocal Obligations. The concept of special relationship implies that each party to the relationship takes on special obligations. For its part, the Office of Education has:

      . Limited competition for dollars. There was a special budget line for each of the two programs originally, and more recently a budget line for "institutional support." These funds could not be used for supporting R&D other than at the labs and centers.

      . Backstopped the institutions with respect to problems associated with lack of working capital.

- Support of institutional missions through indirect cost subsidies. Some other federal and private programs do not pay full indirect costs. When such additional projects have contributed to the institutional mission, OE made up the difference by paying those management costs not otherwise covered. Although diversifying the sources of support has been stated as a goal of the new policy, institutions lacking working capital resources will be unable to take on such projects unless ways are found to continue this kind of support.

- Many grants and contracts are on a reimbursement basis. This means that the unit must incur the expenditures first and be reimbursed later. Without reserve funds of some kind a laboratory could not accept such grants or contracts. (Centers have the fiscal resources of their host universities behind them, but this fact also represents a burden and cost to the universities.)

In return for this kind of support, the Centers and Laboratories have:

. Been responsive to shifts in OE priorities, such as career education, and to OE requirements such as insistence on the specification of development objectives.

. Have permitted OE intrusion on internal management, have responded to heavy reporting requirements, and have opened their programs to burdensome evaluations.

. Have maintained their mission focus in spite of pressures to diversify their effort.

A redefinition of the reciprocal obligations under the new policy for both developing and mature institutions is needed.

b. The Maturity Model and the Resource Building Objective. The current spring review is being conducted on the assumption that, with the exception of one of two special cases, all the laboratories and centers are - or ought to be after six to eight years - mature institutions. How mature are they, in what ways, and will they be viable under the program purchase policy?

First of all, what are the different aspects of "maturity"? The maturity model underlying the support policy recognizes two dimensions: the ability to formulate meaningful basic program plans for the conduct of large scale programmatic R&D, and the ability to manage such programs. The current review is focusing on the quality of the plans and is not examining institutional management capability except incidentally

and on an ad hoc basis; management capability has been assumed on the basis of past institutional assessments. However, preliminary indications from the Specialist Panel phase of the spring review are discouraging with respect to the quality of many program plans, and in a number of cases the quality of management is being questioned also. If such evaluations are confirmed by the Master Panel, NIE will be faced with a dilemma: should it let the chips fall where they may, cutting programs and possibly institutions where they do not measure up? Or should it still recognize a government mission to build the infrastructure for educational R&D by attempting to nurture these institutions to the point of maturity? A third alternative would be to eliminate existing weak programs and institutions but to pursue the infrastructure mission through establishing new institutions.

c. Management Fees and Independent Research Funds. An additional issue concerns the fiscal viability of these institutions. This issue is somewhat attenuated for the centers, which are constituent parts of universities, although there are many related problems concerning the kinds of burdens that the government ought to place on universities, particularly at a time when they are in financial difficulty. [8/] But the laboratories are

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8/ See Raymond J. Woodrow, "Government-University Financial Arrangements for Research", Science, Vol. 176, 26 May 1972, pp. 885-889. See also section II.B.6 on cost sharing.

independent non-profit corporations without fiscal resources of their own. This means that they have no way of keeping staff between contracts, no way of accepting cost reimbursement contracts; no way of accepting grants or contracts that do not pay full indirect costs, no way of paying for kinds of costs that are not allowable under government cost principles, no funds to cover the costs of proposal writing, and no independent research funds to support the project ideas of creative staff members. The management fee and independent research funds proposed in the Frye paper are absolutely essential components of the program purchase policy, and neither the policy nor the institutions are viable until and unless these fees are given official sanction and built into the funding process.

3. How can NIE best support improvements in the field of R&D management and the technology of educational development? NIE has recognized a major objective of continuing to build the infrastructure of educational R&D through the establishment of a Bureau of Resources. Prior to the establishment of the laboratories and centers there had been little attention to the technology of development (except perhaps in the course content improvement movement), and because of the small scale of most educational research the field of research

management was not very sophisticated. The laboratory and center programs can claim to have made considerable progress in these fields,[9/] although much remains to be done. The move to the program purchase philosophy should not signal a loss of concern for these fields: they are an essential part of NIE's resource building mission. It is proposed that a unit be established within the Bureau of Resources to support research and development on R&D management and the improvement of the technology of education development. A number of suggestions for needed work in these fields are contained in a recent draft report sponsored by the National Academy of Education. [10/]

4. How can the proper balance be achieved with respect to a number of policy dilemmas? Many of the problems of transferring these programs and implementing the new policy can be seen in terms of a series of policy dilemmas. Putting these issues in the form of polar opposites does not imply that a choice must be made between the opposites, but rather that NIE must find the right balance along the dimensions thus defined.

9/ See for example the four volume Policies and Procedures Checklist written by the laboratory and center business managers and articles by Richard Schutz and John K. Hemphill in the Journal of Research and Development in Education, U. of Georgia, Vol. 3, No. 2, Winter, 1970.

10/ J. Victor Baldridge and Rudolph Johnson, The Impact of Educational R&D Centers: An Analysis of Effective Organizational Strategies, February 1, 1972, mimeographed.

a. Flexibility vs. Continuity. The nature of programmatic R&D is such that major efforts typically take a minimum of five years from conception to product completion. No results can be achieved unless the agency is prepared to support such efforts over the required time span. On the other hand, in times of rapid social change and with the turnover of agency administrators, priorities for R&D tend to shift and there is always a search for new initiatives. In time the new policy is expected to provide some solution to this dilemma inasmuch as (after the first year or so) some programs will be completed each year thus freeing funds for new initiatives. This may help, but there are also dangers involved. If the new priprity is radically different from the completed program, the funds may well be shifted away from one institution and given to another. Thus we may be establishing a reward structure which is in fact a punishment system: your reward for successfully completing a program is to lose your support for further work. The capability in the first institution may consequently be destroyed and be unavailable should a new need arise in that field. Is NIE willing to pay anything for the maintenance of in-place capability in the major mission areas of educational R&D?

b. Mission Focus vs. Conglomeration. The R&D centers were founded on the basis of the "critical mass hypotheses", i.e., they were intended to move beyond project research and focus resources on large scale programmatic efforts; payoff was expected from having scientists and scholars from different disciplines and fields working together toward common objectives. Most centers have also operated at lower budget levels than laboratories, reinforcing the need for concentration of resources. It is important to maintain a press on institutional mission for the centers because of the strong tradition of individualism among professors. Some of the more successful laboratories have not had a substantive mission focus but are conglomerates in the sense that their several programs do not relate to or reinforce each other. This does not necessarily negate the critical mass hypothesis since these tend to be large laboratories that probably have a critical mass within each program. Since some institutions are successful without having a mission focus it does not seem wise to press all institutions to have one; but it is awkward to press some and not others unless there is some differentiation of objectives which would jutify it. Note that both centers and laboratories currently have mission statements written into their scope of work. If such mission statements are to be retained under the program purchase policy philosophy it must be on the basis that some special relationship still exists.

c. Research vs. Development. Preliminary reading of the Specialist Panel reviews indicates some dissatisfaction with the amount and quality of research in the labs and centers and an apparent over-emphasis on development. The center program has always emphasized both functions, although only a few of the centers have managed to move beyond prototype development (in part because budget levels would not permit). However, NCERD pressure over the years (partly in response to pressures from elsewhere for more immediate results) has emphasized the need for building programs around development objectives. The labs have focused on development as their central function since about 1967-68. Present guidelines and the support policy itself are aimed at development and do not fit research programs readily. The Specialist Panels may well be right in recommending a re-legitimation of the research function. But if this is done, the following cautions should be observed:

- Labs and centers should not be punished for being responsive to past OE pressures toward development.

- The guidelines and assessment criteria should be adapted to place a higher value on research.

Over the past few years there has been a tendency to merge the laboratory and center programs despite their very different organizational base, financial structure, and types of personnel. Perhaps before this merger is completed some thought ought to be given to permitting some degree of differentiation of the purposes, missions, and functions of these two kinds of organizations.

B. Program Management.

Whereas Section II.A. above dealt essentially with ends, the present section will concentrate on means. Listed here are the broader issues of implementing the policy in a new organizational setting. A number of more immediate "nitty gritty" problems are taken up in the following Section III:

1. How will the implementation of the policy be coordinated through the various organizational units of NIE concerned with laboratories and centers? According to the interim organizational plan, the Developing Institutions Program will be in the Bureau of Research and Development Resources, while (most?) purchased programs will be in two different divisions of the Bureau of Educational Systems. Responsibility for evaluation is apparently lodged in an OPPE unit. The new policy is built on the assumption that uniform policies and procedures will be applied to lab and center programs regardless of where they are monitored. How will this coordination be achieved? Also, decisions made about individual programs may cumulate to the point of having major effects on the institution. Is there any unit in NIE which will be concerned with the labs and centers as institutions which will review the cumulative effects of individual program decisions? It has been assumed that there would continue to be a master institutional contract so that

all programs would operate under standardized terms and conditions. Who would be responsible for such institutional contracts and how would they relate to program monitors?

2. What steps will be taken to complete the design of the assessment system for the new policy? The assessment system is still incomplete. The "Spring Review" is not a system for managing the programs under the new policy but a one-time event covering the transfer of the programs from the old to the new. The framework for the assessment system needed is contained in the ten decisions identified in the Frye paper. The report of the Scriven Team [11] is the first chapter in the development of the system, but does not purport to be more. The report of the Stufflebeam Team contains more detailed procedures and is in large part compatible with the Scriven framework. The spring review, including the work of the Specialist Panels, the Synthesis Panel, and reports by consultants, advisors and staff have produced a number of insights, procedures, and documents which would be useful in developing the final assessment system. An early priority for NIE should be to complete the development of the system, building on the work that has been done to date. Part of this task should include the specification of how the

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11/ Scriven, op, cit.

responsibility for the different parts of the system are to be divided among organizational units. For example, the Master Panel will presumably work with the Program Evaluation Unit. Will there be Specialist Panels? If so, will they also relate to the Program Evaluation Unit or to the relevant task force or division? How will the monitoring role be differentiated from evaluation? Is this a meaningful distinction in organizational units with a substantive focus and staffed with substantive experts? etc. etc.

3. What policies are needed with respect to the relation of other NIE programs to laboratories and centers? In the past other OE programs have sometimes been reluctant to consider proposals from laboratories and centers, or to pay full indirect costs for proposals funded. If mature institutions are to be given a more independent status and encouraged to broaden their base of funding, they must be given equal opportunity to compete for other funds both in the unsolicited and directed program. And, as explained elsewhere, since the laboratories have no working capital, other programs must pay full indirect costs.

4. How can the long-range commitments resulting from the program review process be built into the agency budgeting process? Multi-year commitments are an essential part of the new policy. Unless a move is made to full funding programs (which is

unlikely under prospective budget levels), these commitments are of course dependent on congressional appropriation of funds. These future year commitments are not necessarily for level funding; program costs rise and fall at different stages of the research and development cycle. The commitments will not mean much unless the agency builds the continuation costs into its budget requests. This is a problem of immediate urgency. As explained in section III.F. there is reason to doubt that the FY 73 budget request adequately reflects program needs. In addition, this is also the season for building the FY 74 budget, and procedures need to be established for moving from the funding decisions on the Basic Program Plans now being reviewed to the budgeting of continuation costs for FY 74.

Having stated this as to how the system ought to work, it is necessary to identify a problem in making it work. The budget justifications in the BPP's are not as strong as they might be, especially beyond FY 73. Requests for more budget detail were deleted from the BPP guidelines, and consequently the data base for the Master Panel's consideration of program costs is not as good as would be desirable. Nevertheless they constitute the best estimates available, and should be used in the budget making process.

5. How will the diffusion of laboratory and center products be budgeted, organized, and managed? The Frye paper discussed this issue and concludes that there is no sharp break between the R&D process and the diffusion stage.[12] Inevitably the funding of R&D requires the funding of some activities which anticipate and prepare for the diffusion stage. It is quite possible and desirable to make separate funding decisions for the development of a product and for its diffusion, but there should be no assumption that the developer does not have an important role to play in diffusion process. Diffusion is an expensive process, and there need to be ways of supporting it without deleting the money from the support of R&D. Now that NIE has been given clear responsibility for dissemination and diffusion and the programs of the National Center for Educational Communication (NCEC) have been transferred to it, new ways of integrating these processes need to be worked out. Past programs of NCEC have been helpful, but some suggestions should be made:

   . Establishment of a separate NCEC in the OE context implied a "hand it on" philosophy, i.e., the product will be supported and developed in one part of the system and then "handed on" to other agencies. This may be appropriate in some situations, but clearly is not in others. NIE units responsible

12/ Frye, op. cit., pp. 30-33

for support of product development in substantive areas need to be able to move into the diffusion stage as well.

- There is a need for centralized dissemination services such as the Publishers Alert, the Product Display, and PEP. However, too often these services were developed without adequate participation by the programs affected in NCERD. Liaison needs to be improved.

- For the past two years NCEC has let a contract to hold a competition among developed products for award of limited funds for diffusion assistance. Such an approach may be required because of the lack of adequate funds to do more, but it means that the vast majority of developed products are not receiving such assistance. Such an approach increases the danger that developed products will not find their way into use, and that the R&D investment will be lost. Clearly an appeal needs to be made for greatly increased diffusion funds.

6. Should NIE continue to require that universities cost share in the support of R&D Centers? This has been required heretofore and is embedded in the policy of the Cooperative Research Program, which was founded on a grant philosophy although it has

often used the contract instrument. The requirement had to be waived for the laboratories since they have no resources of their own, although the programs supported in laboratories have also been field-initiated. Many universities want to cost-share because they prefer to have their major faculty members on "hard" money. As the policies and procedures for the two programs have been tending to become melded into one, the issue arises whether the Government can require cost-sharing of one and not the other. This may be a further argument for retaining and even augmenting some differentiation in the mission of laboratories and centers. (See also section II.A.4c.)

III. Problems of Implementing FY 73 Funding Recommendations

While specific funding recommendations for FY 73 are not known at this time a number of problems can be anticipated in translating funding recommendations and decisions into negotiated contracts by the end of the contract year on November 30.

A. Checking Funding Recommendations for Consistency with Program Policy.

To some extent it might be argued that the current review is taking place in a policy vacuum. The Frye document is being used as the de facto policy, but it lacks the official sanction of NIE decision makers or publication in the Federal Register. Worse, with the exception of a few individuals, the members of the Specialist Panels and Master Panel have little knowledge of program history or objectives. This has led to the confounding of a number of elements that should have been kept separate in the review. For example, some Specialist Panels have rated programs partly on the basis of technical quality and partly on their perception of the priority of the problems attacked. If the Master Panel or NIE decide on different priorities, they would presumably have to rate the programs differently. Also, if Specialist Panel recommendations are followed in detail some of the institutions will not survive. In these and other areas it is important for NIE to make a determination concerning its policies for the laboratories and centers,

This means that a negotiation which is more of a give and take process would need to take place, and it should occur before the institution submits its ABJ.[13] There must be staff members on board in NIE who are familiar with the program and the review process that has taken place, understand the recommendations, and who can conduct this negotiation. Advisors and consultants cannot do this job for NIE. Some early staffing decisions in NIE therefore become essential.

C. Contract/Grant Terms and Conditions.

At the present time there are 20 contracts and 3 grants with 8 R&D centers, 11 laboratories, 2 vocational research centers, and 2 other entities. The special terms and conditions are keyed to relationships to these as institutions. There are some differences for laboratories and centers based on the fact that laboratories are independent non-profit corporations while centers are constituent parts of universities. The following are some of the issues which should be addressed:

1. Should the grant or contract instrument be used? Under what conditions? For all kinds of institutions? What historical factors need to be taken into account (e.g., university policy on cost-sharing under contracts)?

13/ cf. 4 Scriven, pp. 3-4.

2. What differences in terms and conditions are required for university centers are non-profit laboratories? Centers are tied to university accounting systems, salary schedules, and regulations, and it is difficult to impose conditions which are incompatible with these.

3. Should new contracts or grants be written, or should existing instruments be modified and continued? If new instruments are written, will this eliminate the possibility of carrying over unexpended funds, or can this loss of program money be avoided in some other way?

4. Should developing institutions and mature institutions be treated differently, either in the choice of grant or contract or in specific terms and conditions? This is a complex issue. In a sense developing institutions will be given more general "institutional" support, which would imply the use of a grant. However, monitoring is expected to be close, for which a contract would be more appropriate. Mature institutions will be operating on the basis of specific program plans, but the fact of their maturity should lead to a relaxation of the monitoring relationship. This does not mean a relaxation of their accountability, but rather that they might be relieved of (a) detailed reporting requirements, (b) the need to seek contracting officer

approval for some kinds of actions for which it is now required, (c) evaluation of their management, etc. Such a change for mature institutions is implied by the policy paper,[14] seems intended by NIE planning documents,[15] and is part of HEW policy.[16]

A related issue is the need to move to closure on the classification of institutions as developing or mature. The spring review is taking place as if all institutions were mature although at least some ought to be classified as "developing." Developing institutions require different evaluation criteria and monitoring procedures as well as different contracting procedures. The developing institutions program should not become a dumping ground for weak institutions but should be established with reference to clear agency objectives.

Among the terms and conditions that need to be reviewed are the following:

. Period of performance

. Fiscal reports

. Reports to be furnished

14/ Frye, op. cit. p. 35.

15/ Report on Organization and Management: An Interim Organization, National Institute of Education Planning Unit, April 15, 1972, pp. 19-20.

16/ A Program for Improving the Quality of Grantee Management, Financially Independent Organizations, Vol. I, and Financially Dependent Organizations, Vol. II, pp. 1-2, pp. 57-58.

. Contract related income

. Reprogramming funds

. Copyright policy (note that we have operated under what is specifically an OE policy, not an HEW policy)

. Method of payment

. Indirect cost subsidies

. Institutional mission statement and scope of work (see also section II.A.4.b.)

Perhaps the scope of work deserves special comment. Under current contracts the scope tends to be very detailed concerning each step of the process. In effect the institutions are being monitored with respect to both means or process and achievement of objectives. One of the implications of the new policy is that for mature institutions there should be less concern for means or process and more with the intermediate and ultimate objectives. Among the things we need to learn to do better are how to differentiate between means and ends, how to write the specifications for the ultimate outcomes in educational terms, and how to identify major milestones along the way which either represent the achievement of sub-objectives which are ready to be evaluated or which represent important decision points. In a programmatic effort[17] the means may have to change in

17/ For the difference between program management and project management see John K. Hemphill, "Management and Operation of Educational Laboratories," Journal of Research and Development in Education, Vol. 3, No.2, Winter 1970, pp. 65-80.

the light of emergent results; a mature institution should be allowed to change its approach if its initial approach does not yield the expected results. What counts are the final outcomes. The contract scope of work is the means for establishing accountability for the program; it should include items which are essential to that objective and exclude those which are not.

It is highly desirable that the terms and conditions be reviewed and revised through a genuine process of negotiation and not by unilateral Government action. Government officials are often not aware of the full implications of changes and their impact on the costs and functioning of the laboratories and centers. For example, changes in budget requirements may cause expensive changes in accounting systems. NCERD has established working relationships with the organization of lab and center business officers, and meetings with this group have often proved useful. During the past year the business managers produced a four volume set of "Policies and Procedures Checklists" governing the internal management of their institutions which are geared in many respects to current contract terms and conditions.[18/] It would be important to study these volumes while reviewing the terms and conditions.

18/ op. cit.

There is another set of terms and conditions which are not so much at the discretion of the individual program but are mandated by regulations at higher levels of HEW, the executive department, or by Congress. Whatever their other virtues, a number of these are counterproductive with respect to the efficiency and effectiveness of the programs in laboratories and centers. Although it may not be within NIE's power to change them, as a new agency with new policies it should make a careful study of these regulations and their effects on programs with a view toward seeking modification or elimination of the regulations where appropriate. Although this is not the place to go into details, NCERD has already done staff work on a number of these issues. Examples include the following:

- Printing and binding regulations
- Forms clearance and protection of human subjects
- Equipment and data processing
- Setting up revolving funds
- Use of the FTS network
- Authorization for production of films or other media products
- Title to property
- Model Cities certification

D. What kind of new budget structure is needed to accommodate the new policy?

It is not possible to go into detail here, but the new policy would have many implications for the structuring of budgets and accounting systems. These would of course differ for developing and mature institutions. Different kinds of costs need to be sorted out as direct, indirect or other costs. The management fee and independent research funds are intended to cover the "other costs."[19] The allowability and handling of a number of kinds of costs covered in the past need to be reviewed, for example, costs which support an institutional mission but are not attributable to any one program; costs of maintaining linkages with state and local schools systems; costs of developing new program ideas, etc.

E. Sole Source Procurement and Long-Range Commitments.

There has been increasing concern whether specific procurement actions adequately reflect the need for competition, or conversely whether they have an adequate justification for sole source procurement. The present review is largely (although not entirely) of continuing programs, and all are competing with each other. In the future new programs may be initiated individually. Again, we have the issue of the special relationship and the degree of competition needed. The new policy and assessment system involves review of and commitment

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19/ For the rationale behind establishment of the management fee and independent research funds, see Frye, op. cit., pp. 18-24.

to multi-year program plans. How can that commitment be established contractually? Can full funding or any degree of multi-year funding be established? Will the sole source issue be avoided on continuation in subsequent years.[20]

F. Meeting the Increased Cost of the New Policy.

According to the new policy, when an institution attains mature status and comes under the program purchase philosophy it is eligible to receive a management fee and funds for independent research. As explained elsewhere, these additional costs are considered essential to the viability of both the new policy and the institutions it covers. Yet apparently no provision has been made for these increased costs in the projected FY 1973 budget for NIE. Indeed, the figure presented for Institutional Support, $32,100,000, while apparently intended as a level continuation, actually represents a substantial cut in funding for laboratory and center programs. As explained in the attached table, lab and center programs were actually funded out of three budget lines in FY 72: institutional support ($32.1K), vocational/research ($2,77K) and general R&D ($1,0K). Thus, $35.87K would be required to continue these programs under the old policy. If the costs of the management fee and independent research are added, nearly $40K would be required. (If the research centers

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20/ The OE Sole Source Board initially wished to review continuation funding for lab and center programs, but when the first test case came before it, the Board decided that continuations did not need to be reviewed.

from the education of the handicapped are included, the figures are correspondingly higher.) It will be very difficult to gain acceptance of the new policy if the laboratories and centers must first cut their programs because adequate funds for level continuation are not available, and then must cut again to absorb the costs of the management fee and independent research. (Of course none of this takes into account that with inflation, level funding means a decrease in total effort.)

G. Cost Problems Facing the Master Panel.

There are several other problems dealing with cost which are not so much problems of implementing the Master Panel recommendations as problems which the Master Panel should consider in arriving at its recommendations.

1. The FY 73 cost of programs not recommended for funding is not zero except in the case of the few proposals for new programs. It is usually desirable to bring the work to some point of completion, to meet personnel commitments, etc. In the past close-out costs have been up to 50% of the prior year costs over a six-month period. Quite possibly such costs could be lowered considerably in the future, but not to zero.

2. The Master Panel should be making recommendations about multi-year commitments. If not, the implementation of new policy should be postponed.

3. It would be desirable for the Master Panel to use the FY 72 funding level for each program as a point of reference. Many programs may be requesting budget increases which can be granted only at the expense of eliminating another program, and the trade-off may or may not be worth it.

4. Indirect costs may have been under-budgeted by laboratories and centers. The program purchase policy requires more sophisticated and expensive accounting system for segregating costs by program.

IV. Conclusion

NCERD has been moving vigorously for over a year to formulate a new institutional support policy and design an assessment system keyed to the new policy. The work was originally predicated on the assumption that NIE would come into being in the Fall of 1971. When the passage of the new legislation was considerably delayed, NCERD continued its movement toward the new posture by implementing a full-scale review of laboratory and center programs by a series of Specialist Panels. It has discharged its responsibilities and paved the way for the NIE takeover with the assumption of the reports of the Specialist Panels on June 30.

The most crying need at the present time is for NIE to come into full being, staffed with people who have complete authority to act for the new agency. NIE needs to move to closure on the new policy and publish the new rules and regulations in the Federal Register. This step is prerequisite to everything else, for everything else should flow from policy. It is then necessary to legitimize the spring review as it has taken place to date and is continuing and to move to more specific aspects of implementation through establishing the necessary organizations and procedures.

Some difficulty has already been caused by the fact that things have gotten out of sequence. For example, the assessment system design called for the Master Panel to be established first, with the

Specialist Panels to act as the "eyes and ears" of the Master Panel. For unavoidable reasons it happened the other way around, and the Master Panel is now trying to catch up with what has been going on. Now that NIE has been established it is very important that the program steps be put back in proper sequence, with the flow being from policy to procedures. Undue haste should be avoided. It would be disastrous to move any further on the assumption that we know what the new policy is; the new policy must be fully legitimated by the new NIE Director and his Council by whatever means are appropriate. Otherwise we run the risk of making changes in program management that have a major impact on the nature of the program and the viability of the labs and centers only to find that the policy isn't what we thought it was.

The present paper has attempted to identify a number of issues concerning the transfer of the laboratory and center programs to NIE without in any way trying to provide all the answers. These issues deserve careful study by people who can bring a variety of skills and experience to bear on them. There is no reason why this study should not begin immediately with the understanding that closure should not be reached until the more fundamental policies have been decided. It would be unwise to assume that everything must be settled in the next few weeks and incorporated immediately into the FY 73 contracts and grants. Rather, FY 73 should be considered a year of transition during which NIE moves carefully and

deliberately to establish the program on a firm footing which will last for a reasonable number of years and not be subject to immediate demands for change.

WSM
5/15/72

Attachment A

FY 73 Funding Requirements for Level Continuation of Lab-Center Purchased Programs and Developing Institutions

DRDR Program by Budget Source	Total	Program	Indep. Res. @ 8%	Mgmt. Fee @ 3%
A. Total DRDR	$40,368,200	$36,670,000	$2,689,600	$1,008,600
1. Inst. Support	35,433,000	32,100,000	2,424,000	909,000
2. Voc. Ed.	3,025,200	2,770,000	185,000	69,600
3. Gen'l R&D Development	1,110,000	1,000,000	80,000	30,000
4. Handicapped	800,000	800,000	-	-
B. Developing Institutions	3,050,000	3,050,000	-	-
1. Inst. Support [a]	1,800,000	1,800,000	-	-
2. Voc. Ed. [b]	450,000	450,000	-	-
3. Handicapped	800,000	800,000	-	-
C. Purchased Programs	37,318,200	33,620,000	2,689,600	1,008,600
1. Inst. Support	33,633,000	30,300,000	2,424,000	909,000
2. Voc. Ed. [c]	2,575,200	2,320,000	185,600	69,600
3. Gen'l R&D Development [d]	1,110,000	1,000,000	80,000	30,000

a/ NPECE and a new institution.
b/ North Carolina State
c/ Ohio State. Does not include $465K program now funded and monitored by Career Education task force.
d/ WICHE/NCHEMS: $1,000,000 is the 12 month cost of the program funded for approximately 9½ months in FY 72.